Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) Method for synchronization in a communication network comprising at least two buses interconnected by a wireless communication network, each bus being linked to the wireless communication network by a portal, the method comprising the steps of:

- determining a so-called cycle server portal ~~whose own clock~~ comprising a reference clock that will serve as reference for the other portals;

- transmitting, via each portal, a synchronization signal at a predetermined instant with respect to the start of a frame and characteristic of each portal, the frame being defined with respect to an internal clock of each ~~portal's own internal clock~~ portal, the synchronization signal being achieved via the insertion of a control window; and

- detecting, [[via]] by each portal, the control windows of other portals and selecting one of the detected windows for the synchronization of the receiver portal's [[own]] internal clock with the reference clock of the cycle server portal, the selected window corresponding to a portal whose clock is already synchronized with [[that]] the reference clock of the cycle server portal.

2. (Previously Presented) Method according to Claim 1, wherein a control window comprises at least a part of a value of the clock of the transmitter portal of the control window, the value being that of the clock at the moment of transmission of the control window, the value transmitted being used by the receiver portal to update the value of its own clock.

3. (Previously Presented) Method according to Claim 2, wherein the clock value transmitted by a portal comprises a correction for compensating for the processing time of the control window on transmission.

4. (Previously Presented) Method according to Claim 2 wherein the clock value received by a portal is corrected, before the updating of the value of its own clock, so as to take account of the reception processing time of the portal.

5. (Previously Presented) Method according to claim 2 wherein the clock value is split up into several groups of bits transmitted over successive control windows transmitted by one and the same portal.

6. (Previously Presented) Method according to claim 1 wherein it furthermore comprises the step of determining, by each portal, its distance with respect to the cycle server portal, the distance of a given portal being defined as being the minimum number of repeater portals required in order for an item originating from the cycle server portal to reach the given portal.

7. (Previously Presented) Method according to Claim 6, wherein the control window chosen by a given portal for synchronizing itself is the control window of a portal having the shortest distance among the control windows received by the given portal.

8. (Previously Presented) Method according to claim 1 wherein it furthermore includes the step of locking a phase locked loop of a receiver portal to the instant of reception of the selected control window, the phase locked loop being used to increment a register containing the portal's own clock value.

9. (Previously Presented) Method according to claim 1 wherein it furthermore comprises the step of selecting a cycle master node of the entire communication network from among the nodes connected to the network, the cycle server portal being the portal connected to the bus to which the cycle master node of the network is also connected, the cycle server portal synchronizing its own clock to a clock of the cycle master node of the network.

10. (Previously Presented) Method according to Claim 9, wherein the communication buses being of the IEEE 1394 type, the synchronization of the

cycle server portal to the cycle master node of the network is performed by way of cycle start packets transmitted by the node, the frequency of transmission of frames over the wireless part of the network being a submultiple of the frequency of transmission of the cycle start packets.

11. (Previously Presented) Method according to claim 1 wherein a clock belonging to a portal which is not the cycle server portal is used to synchronize the bus to which the portal is connected.

12. (Previously Presented) Apparatus for interfacing a cable bus and a wireless communication network, the apparatus comprising:

- means of clock recovery utilizing the cable bus, the recovery means comprising a phase locked loop for locking onto a periodic signal travelling around the cable bus and a counter for counting an own-clock absolute value, the counter being linked to a clock derived from the phase locked loop for the incrementation of the counter, the absolute value of the counter being synchronized with that of a node connected to the cable bus; and

- means of periodic transmission to the wireless communication network of a control window serving as time reference for the other apparatuses connected to the wireless network, the generation of the control window being bound with the state of the counter, the control window comprising an item relating to the state of the counter at the moment of transmission of the control window.

13. (Currently amended) Apparatus for interfacing a cable bus and a wireless communication network, the apparatus comprising:

- means of clock recovery utilizing a signal transmitted over the wireless communication network, the recovery means comprising a phase locked loop and an own-clock register;

- means for selecting one control window from among a plurality of control windows transmitted over the wireless network;

- means for extracting a synchronization of the control window for feeding the phase locked loop; and

- means for extracting items relating to [[the]] an absolute value of a reference clock of the control window, and for updating the own-clock register.